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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,083	12/23/1999	RAJEEV KOODLI	730.37334X00	6982

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EXAMINER
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NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 11/13/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/471,083

Applicant(s)

KOODLI ET AL.

Examiner

Andrew Nalven

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims site the limitation "Internet Control Message Protocol (ICMP), and port number information." The use of the word "and" implies that information from each of the defined transport level protocols exist in the same packet. The examiner suggests the term "and" be changed to "or."

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4, 14 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Levesque et al US Patent No 5,825,891. Levesque discloses a key management system for network communication.
5. With regards to claims 1 and 11, Levesque teaches that prior to performing encryption on the payload of the packet, information is stored in the header that is not

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subjected to encryption (column 3, lines 28-39). The system then performs encrypting security processing on the payload of the packet (column 3, lines 40-45). The partially encrypted packet is then transmitted by a node in the network (column 3, lines 63-65).

6. With regards to claims 4 and 14, Levesque discloses selected information being stored in a security protocol header of the packet (column 3, lines 30-32). The security protocol header is not subject to encryption (column 4, lines 8-9).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-3, 5-7, 12-13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al US Patent No 5,825,891 in view of Denker US Patent No. 5,958,053.

9. With regards to claims 2-3 and 12-13, Levesque, as previously described, lacks a reference to selected information including transport level information such as TCP, UDP, ICMP, or port number information. Denker discloses selected information including TCP info such as a port number (column 3, lines 25-59). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize transport level information in the header such as SYN cookies because it can be used as a security feature to resist SYN floods (column 3, lines 6-27).

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10. With regards to claims 5-6 and 15-16, Levesque, as previously described, lacks a reference to selected information being stored in a modified sequence number in the header. Denker discloses that the client's sequence number is modified to include selected information (column 3, lines 25-59). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize transport level information in the header such as SYN cookies because it can be used as a security feature to resist SYN floods (column 3, lines 6-27).

11. With regards to claims 7-8 and 17-18, Levesque, as previously described, lacks a reference to leading bits of the sequence number being used for selected information and the remaining bits being used for sequencing. Denker discloses bits being designated for selected information such as TCP and port numbers and the remaining bits being designated for sequencing (column 3, lines 6-27 and Figure 2). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use leading bits for protocol info and trailing bits for sequencing because it would retain the benefits of a traditional IP sequencing system and would help prevent SYN flood attacks against the system.

12. Claims 9-10 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levesque et al US Patent No 5,825,891 in view of Atkinson et al RFC 2401. Levesque lacks a reference to encryption security processing in the form of the encapsulated security payload protocol (ESP) or authentication header protocol (AH). Atkin teaches the use of ESP and AH in IP security (Atkinson, Section 3.1, Page 6). At

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the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use AH or ESP for security of the packet data body because they provide confidentiality, data origin authentication, and anti-replay services (Atkinson, Section 3.1, Page 6).

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry regarding this communication from the examiner should be directed to Andrew Nalven at (703) 305-8407 during the hours of 7:15 AM – 4:45 PM Monday through Thursday. The examiner can also be reached on alternate Fridays.

In the event that attempts to reach the examiner are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703) 308 – 4789.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

(703) 872-9306 (for formal communications intended for entry)


**Or:**

(703) 872-9306 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100